

REMARKS

Claims 1-2 and 4-9 are all the claims pending in the application.

Applicants acknowledge that the Examiner has wide discretion in entering an Amendment after a final Action. In the present case, Applicants have merely amended claim 1 by deleting tin oxide from the Markush group therein. Accordingly, Applicants respectfully request the entry and consideration of amended claim 1.

I. Paragraph Nos. 4-8: Rejections Under 35 U.S.C. § 103

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Inoue, *et al.* EP 0 901 991 A2 ("Inoue").

Claims 7-9 are rejected under 35 U.S.C. 103(a) as allegedly being obvious over Inoue in view of XP 002151982 ("XP '982") and EP 08 20 967 A1 ("EP '967").

Applicants' Response

The cited art, whether Inoue on its own or Inoue in combination with XP '982 and EP '967, does not disclose the presently claimed article comprising an oxide semiconductor film consisting essentially of at least one metal oxide selected from the group consisting of niobium oxide and zirconium oxide.

For example, Inoue discloses a first interlayer made of aluminum oxide, tin oxide, indium oxide, zinc oxide or silicon oxycarbide (Applicants refer to page 4, lines 4-5 of Inoue).

Furthermore, there is no teaching or suggestion within the cited art that would motivate a person of ordinary skill in the art to modify Inoue's disclosure in order to arrive at the presently claimed invention. As the Examiner has noted, Inoue is silent with respect to energy band gaps. Therefore, there is no motivation to modify Inoue's article to include a first n-type semiconductor primer layer film (i) having an energy band gap larger than that of a photocatalyst film and (ii)

AMENDMENT
U.S. Appln. No. 09/630,777

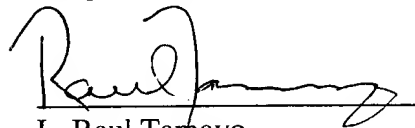
being an oxide semiconductor film consisting essentially of at least one metal oxide selected from the group consisting of niobium oxide and zirconium oxide.

For the foregoing reasons, Applicants respectfully request that the Examiner reconsider and withdraw these §103 rejections.

II. Conclusion

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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PATENT TRADEMARK OFFICE

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

1. (TWICE AMENDED) An article having photocatalytic activity which comprises a substrate, a first n-type semiconductor film as a primer layer formed over a surface of the substrate, and a photocatalyst film made of an n-type semiconductor and formed on the primer layer, said first n-type semiconductor film as the primer layer (i) having an energy band gap larger than that of said photocatalyst film and (ii) being an oxide semiconductor film consisting essentially of at least one metal oxide selected from the group consisting of niobium oxide, ~~tin oxide,~~ and zirconium oxide.